



FLUORESCENT LEAK DETECTION & SYSTEM ADDITIVES





FLUORESCENT LEAK DETECTION TOOLS

Working for you 24/7 – Once IN, always ON.



The Original Fluorescent Leak Detection Solution!

Table of Contents

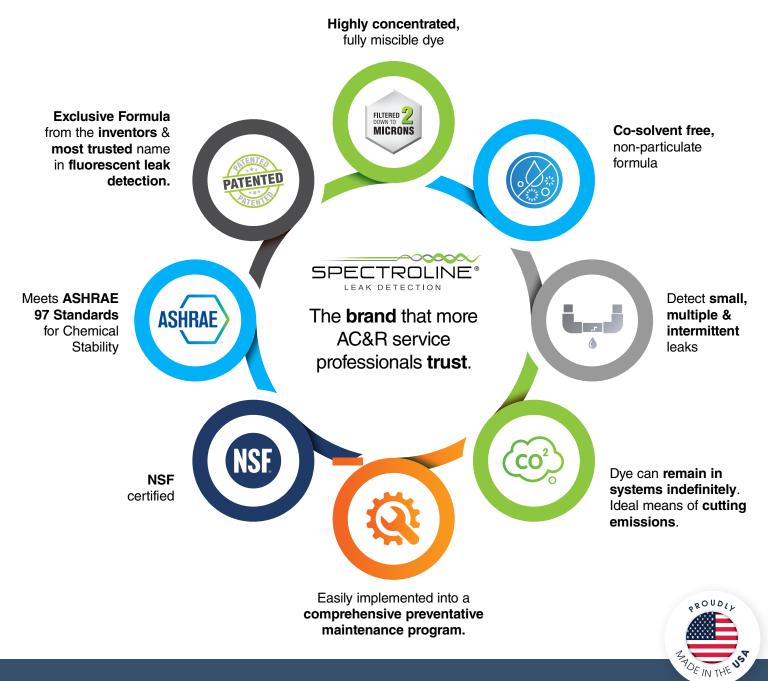
Spectroline Advantage	3
Dye Injection Systems	
EZ-Ject [™] Dye Injection System	4
GLO-STICK® Dye Capsule System	5
BigEZ [™] Dye Injection System	6
AR-GLO® 5E Fluorescent Leak Detection Dye	6
System Additives	
GLO Seal [™] Fluorescent Dye with Sealant8-	.9
Cool Seal [™] A/C Leak Sealer 1	0
ACID-BUSTER [™] Acid Scavenging Solution 1	11

WATER-GLO® ULTRA Fluorescent Leak Detection Dye.. 12

Dye Cleaner	
GLO-AWAY [™] PLUS Fluorescent Dye Cleaner	12
Leak Detection Lamps	13
FAQ	14
Dosage Charts	15

THE SPECTROLINE ADVANTAGE

Fluorescent Leak Detection is an extremely accurate and effective way to find HVAC/R leaks. It's important to choose a brand who produces pure, safe, highly concentrated dyes and quality inspection lamps to get the most benefit from the technology.





Inventors & Pioneers

For over 67 years, Spectronics Corporation has engineered the highest-quality, premium performance leak detection dyes and products.

As the **inventors of ultraviolet fluorescent leak detection**, we take pride in crafting the most superior leak detection dyes and system additives in the industry.

Spectronics Corporation is a family owned company with three generations of experience in delivering award-winning professional service and the industry's most powerful leak detection dyes, additives and lamps.





PSI

EZ-Ject[™] (Patented) Fluorescent Dye Injection System

The revolutionary way to add fluorescent dyes into air conditioning and refrigeration systems - without the use of additional refrigerant, manifold and additional hoses.

- No pouring and no refrigerant required for injection.
- One calibrated cartridge provides exact dosing for multiple systems. Easily overcomes system pressure.
- Inject dye with a turn of the handle.



AR-GLO® 5E: Brighter Performance Dye

Works in all AC&R **₩450** systems, overcomes system pressure

SCAN FOR VIDEO

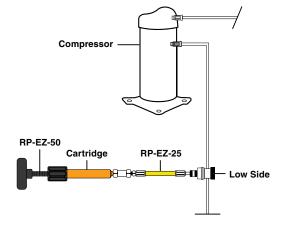


Small-Medium Sized AC&R Systems

S-M







Reusable Injector Assembly: Save money on unnecessary hardware with each application!

Product No. Description Treats up to SPE-HVLEZE EZ-Ject[™] COMPLETE Fluorescent Leak 4 gal (15.2 L) of lubricant or **Detection Kit:** 50 lbs (22.6 kg) of refrigerant SPECTROLINE ► SPE-HVL-CS UV LED leak detection lamp or 24 tons (84.4 kW) of ► (2) SPE-EZ5E 0.5 oz (15 ml) universal/POE dye EZ-Jec coolina cartridges ► RP-EZ-50 EZ-Ject[™] dye injector assembly ▶ RP-EZ-25 8 in (20 cm) EZ-Ject[™] hose assembly ► RP-AD-410A R-410a adapter/purge fitting SPE-EZ5E-CS (1) 0.5 oz (15 ml) EZ-Ject[™] universal/POE dye 2 gal (7.6 L) of lubricant or 25 lbs (11.3 kg) of refrigerant cartridge or 12 tons (42.2 kW) of 0 cooling SPE-EZ100E-CS EZ-Ject[™] Dye Injection Kit: 4 gal (15.2 L) of lubricant or (2) SPE-EZ5E 0.5 oz (15 ml) universal/POE dye 50 lbs (22.6 kg) of refrigerant cartridges or 24 tons (84.4 kW) of RP-EZ-50 EZ-Ject™ dye injector assembly ► cooling RP-EZ-25 8 in (20 cm) EZ-Ject[™] hose assembly ► ► **RP-AD-410A** R-410a adapter/purge fitting





Universal/POE Dye: NSF Certified to meet food-grade processing requirements for category codes HTX2 and HX-2



GLO-STICK[®] (Patented) Fluorescent Dye Capsule System

Convenient, mess-free, single-dose capsules. Add refrigerant and fluorescent dye in one simple step.

- Available in 3 sizes/concentrations to match the capacity of the system.
- ▶ Inject dye while charging with refrigerant, or when connecting from the high side to the low side.



S-M

Small-Medium Sized AC&R Systems

Co-Solvent

Dye Injection System

AR-GLO® 5E: Brighter Performance Dye

Works in all AC&R **%450** systems, overcomes PSI system pressure



Treats up to

3x **A A A** UV Batteries Included GLO-AWAY 3x Drip Plugs LED Fluorescen Service Labels

Description



GLO-STICK [®] COMPLETE Fluorescent Leak Detection Kit: ► SPE-HVL-CS UV LED leak detection lamp ► (1) SPE-GS1E 0.5 oz (15 ml) dye capsule ► (2) SPE-GS2E 0.5 oz (15 ml) dye capsules ► (1) SPE-GS3E 0.5 oz (15 ml) dye capsule ► RP-BV-50 bleed valve ► RP-EZ-25 8 in (20 cm) EZ-Ject TM hose assembly ► RP-AD-410A R-410a adapter/purge fitting ► Purge capsule	See below for dosage amounts of the GLO-STICK [®] capsules	SPECTROLING GLO-STICK' 2E STORE STATUS
GLO-STICK [®] 1E (1) 0.5 oz (15 ml) universal/POE fluorescent dye capsule	1.6 qt (1.5 L) of lubricant or 4.9 lb (1.4 to 2.2 kg) of refrigerant or 2 tons (7 kW) of cooling	Mental and the second s
GLO-STICK [®] 2E (1) 0.5 oz (15 ml) universal/POE fluorescent dye capsule	1.7 to 3.2 qt (1.6 to 3 L) of lubricant or 5 to 9.9 lb (2.3 to 4.5 kg) of refrigerant or 6 tons (21.1 kW) of cooling	
GLO-STICK® 3E (1) 0.5 oz (15 ml) universal/POE fluorescent dye capsule	3.3 qt to 2 gal (3.1 to 7.6 L) of lubricant or 10 to 25 lb (4.6 to 11.3 kg) of refrigerant or 12 tons (42.2 kW) of cooling	Newspace

For systems using PVE lubricant: SPE-GS1PVE-P6, SPE-GS2PVE-P6, SPE-GS3PVE-P6



Universal/POE Dye: NSF Certified to meet food-grade processing requirements for category codes HTX2 and HX-2



Product No.

SPE-HVLGSE

SPE-GS1E-CS

SPE-GS2E-CS

SPE-GS3E-CS



PSI

No pouring, no refrigerant, no spills — prefilled BigEZ™ cartridges are clearly labeled with 32 or 64 calibrations so you'll introduce exactly the right amount of dye every time!

- One calibrated cartridge provides exact dosing for multiple systems.
- Easily overcomes system pressure.
- Inject dye with a turn of the handle.



AR-GLO® 5E: Brighter Performance Dye

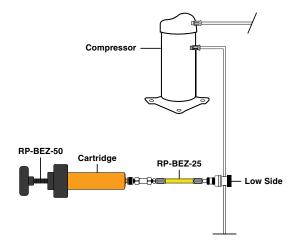
Works in all AC&R **#200** systems, overcomes system pressure

SCAN FOR VIDEO



Medium-Large Sized AC&R Systems





(3) 4 oz (118 ml) BigEZ[™] Fluorescent Dye Cartridge for Oil-Less Systems

Reusable Injector Assembly: Save money on unnecessary hardware with each application!

BiaEZ



Product No.	Description	Treats up to
SPE-HVLBEZE	 BigEZ[™] COMPLETE Fluorescent Leak Detection Kit: SPE-HVL-CS UV LED leak detection lar SPE-BEZSE 4 oz (118 ml) BigEZ[™] fluor dye cartridge RP-BEZ-50 BigEZ[™] dye injector assem RP-BEZ-25 8 in (20 cm) BigEZ[™] hose a with low-loss fitting & check valve 	escent
SPE-BEZ5E-4CS	(1) 4 oz (118 ml) BigEZ™ universal/POE dye cartridge	16 gallons (61 L) of lubricant or 400 lbs (181 kg) of refrigerant or 150 tons (527.5 kW) of cooling
SPE-AG5E-16	AR-GLO [®] 5E Fluorescent Leak Detection ► (1) 16 oz (473 ml) twin neck bottle	n Dye 64 gallons (242 L) of lubricant
	A	Iso Available: SPE-BEZOLE-4P3







Universal/POE Dye: NSF Certified to meet food-grade processing requirements for category codes HTX2 and HX-2

SYSTEM ADDITIVES

Professional Grade Solutions to Protect AC&R Systems from Leaks





にいた



PSI











THE POWER OF GLOSEAL

PREMIUM DYE

OEM-Grade Fluorescent Dye 2-in-1 Solution Works with All Refrigerants

+ POWERFUL SEALANT

Powerful & Safe Non-Polymer Sealant, Not Activated by Air or Moisture

24/7 Performance Multiple Delivery Methods



Find & Fix Immediate Leaks

Scan the system with a UV Light to find all leak areas glow brightly with GLO Seal[™] concentrated dye. Make an external repair to ensure all large leaks are fixed. GLO Seal[™] can remain safely in the system.

TROLIN

5 TONS

SEAL A

SPE-**EZDS**

5 TONS

2IN Solution

V

Seal Difficult to Find Leaks

GLO Seal[™] pinpoints the location of all internal micro-leaks, forming a repair from the inside.

24/7 Leak Detect + Ongoing Sealant

Scan the system periodically to find new leaks. Small, hard-to-find leaks hurt system performance and will eventually lead to total compressor burnout. Have peace of mind as GLO Seal[™] works for you 24/7 for continual leak detection and ongoing sealing!

GLO SEAL Fluorescent Dye with Sealant

- Pinpoint micro-leaks with our exclusive, OEM-Grade dye formula
- 2-in-1 premium dye with powerful sealant
- Concentrated dye ensures all leaks are found
- Sealant repairs hidden micro-leaks and stops deterioration from the inside
- Perfect for preventative maintenance Scan the system to reveal new leaks
- Works for you 24/7 Continuous leak detection and ongoing sealing



₩450

Compressor





Works in all AC&R systems, overcomes system pressure

3.5 TONS

Increased System Treatment Capacity



GLO Seal[™]

Fluorescent Dye + Sealant

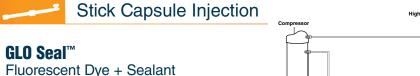
- ▶ 0.5 oz (15 ml) cartridge
- ► Use with EZ-Ject[™] Injector System

RP-EZ-50	Cartridge	RP-EZ-2	25	
┣┷═	3 98			/ Side

Product No.	Description	Treats up to
SPE-EZDS-CS	(1) EZ-Ject™ cartridge prefilled with GLO Seal™ Fluorescent Dye + Sealant	3.5 tons (12.3 kW) of cooling
SPE-EZDSK-CS	 GLO Seal[™] EZ-Ject[™] Dye Injection Kit: (2) SPE-EZDS 0.5 oz (15 ml) EZ-Ject[™] cartridges prefilled with GLO Seal[™] Fluorescent Dye + Sealant RP-EZ-50 EZ-Ject[™] dye injector assembly RP-EZ-25 8 in (20 cm) EZ-Ject[™] hose assembly RP-AD-410A R-410a adapter/purge fitting Service labels adapter 	7 tons (24.6 kW) of cooling



Reusable Injector Assembly: Save money on unnecessary hardware with each application!



▶ 0.5 oz (15 ml) stick capsule

Requires bleed valve for injection

Compressor		High Side —∎∭	1	
Low Side -	RP∙EZ-25 □ De 	Bleed Valve		



Product No.	Description	Treats up to
SPE-GSDS-CS	 Stick capsule prefilled with GLO Seal[™] Fluorescent Dye + Sealant 	3.5 tons (12.3 kW) of cooling
RP-BV-50	Bleed valve (sold separately)	



COOLSEAL[™] (Patented) A/C Leak Sealer

Seals micro leaks in condensers, evaporators, O-rings and hoses. Can add years to older, out-of-warranty AC&R systems that leak small amounts of refrigerant.

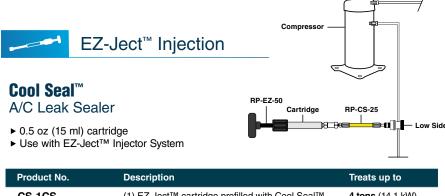
- Works with all popular refrigerants and oils.
- Remains safely in system to help protect against future leaks.





SAFE, NON-POLYMER Oil-Soluble Formula Works in all AC&R systems, overcomes system pressure

System Treatment Capacity



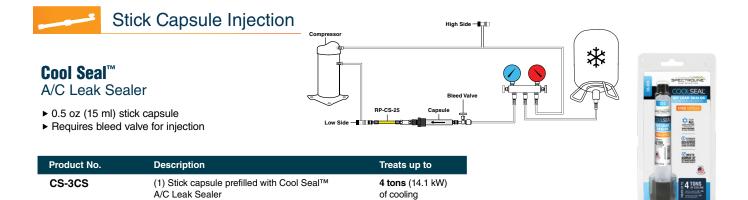
CS-1CS	 EZ-Ject[™] cartridge prefilled with Cool Seal[™] A/C Leak Sealer 	4 tons (14.1 kW) of cooling
CS-100CS	 Cool Seal™ EZ-Ject™ Dye Injection Kit: (2) CS-1 0.5 oz (15 ml) EZ-Ject™ cartridges prefilled with Cool Seal™ A/C Leak Sealer RP-EZ-50 EZ-Ject™ dye injector assembly RP-CS-25 8 in (20 cm) Cool Seal™ EZ-Ject™ hose assembly RP-AD-410A R-410a adapter/purge fitting Service labels 	8 tons (28.1 kW) of cooling

Bleed valve (sold separately)





Reusable Injector Assembly: Save money on unnecessary hardware with each application!



RP-BV-50

ACID-BUSTER[™](Patented) Acid Scavenging Solution

Ready-to-use solution, eliminates acid-build up and helps prevent compressor burnout. Use for preventative maintenance and repair - it will not contaminate the refrigerant or lubricant or leave behind harmful residue. Compatible with semi-hermetic, hermetic and scroll compressors.

- Twice as concentrated as competitive solutions
- Works with all refrigerants and lubricants
- Direct, reusable injector protects against overdosing



Components

Safe for System

Works in all AC&R 將450 systems, overcomes system pressure

RP-EZ-25

≥¤îľ∎

- Low Side

Compressor

Cartridge

PSI

RP-EZ-50



Prevents **Compressor Burnout**



ACID-BUSTER[™] Acid Scavenging Solution

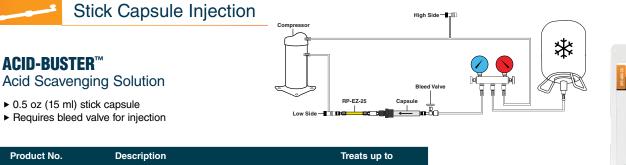
- ► 0.5 oz (15 ml) cartridge
- ► Use with EZ-Ject[™] Injector System

Product No.	Description	Treats up to
AB-5CS	(1) EZ-Ject™ cartridge prefilled with ACID-BUSTER™ Acid Scavenging Solution	2 tons (7 kW) of cooling
AB-100CS	 ACID-BUSTER™ EZ-Ject[™] Dye Injection Kit: (2) SPE-EZDS 0.5 oz (15 ml) EZ-Ject[™] cartridges prefilled with ACID-BUSTER™ Acid Scavenging Solution RP-EZ-50 EZ-Ject[™] dye injector assembly RP-EZ-25 8 in (20 cm) EZ-Ject[™] hose assembly RP-AD-410A R-410a adapter/purge fitting Service labels adapter 	4 tons (14.1 kW of cooling





Reusable Injector Assembly: Save money on unnecessary hardware with each application!



Product No.	Description	Treats up to
SPE-ABS-CS	(1) Stick capsule prefilled with ACID-BUSTER™ Acid Scavenging Solution	2 tons (7 kW) of cooling
RP-BV-50	Bleed valve (sold separately)	





WATER-GLO[®] ULTRA

(Patented)

Fluorescent Leak Detection Dye

Find leaks fast in industrial sized water and water/glycolbased fluid systems. Concentrated dye that fluoresces green and works in both static and circulating fluid systems.

IDEAL FOR:

 Heat transfer fluid system applications – boilers, chillers, geothermal heat pump systems and many more.



Brighter Performance Dye MICRONS

FULLY MISCIBLE: High Quality, non-particulate and filtered down to 2 microns.



Co-Solvent Free Dye

WATER-GLO[®] ULTRA

Fluorescent Leak Detection Dye

- ▶ 8 oz (237 ml) twin neck bottle
- ► Full color hanging clamshell

Product No.	Description	Treats up to
SPE-WGG-8CS*	WATER-GLO [®] ULTRA Fluorescent Leak Detection Dye	500 gallons (1,893 L) of water
*Additional sizes ava	ilable	

tional sizes avalla



WATER-GLO® Ultra Dye: NSF Certified to meet food-grade processing requirements for category codes G7, GX and HTX2



GLO-AWAY[™] PLUS + Fluorescent Dye Cleaner

- ▶ New formulation that works to **dissolve** fluorescent dye from the leak site.
- Requires less application & less time removing left over dye.



Other Dye Cleaners



GLO-AWAY PLUS



Stronger formula makes it easier to remove the toughest dye stains.



GLO-AWAY[™] PLUS Fluorescent Dye Cleaner

2 oz (60 ml) spray bottle

Product No.	Description
RP-GA-2	GLO-AWAY™ PLUS Fluorescent Dye Cleaner

SPECTROLINE® UV LED Leak Detection Flashlight

SPE-HVL-CS

- Battery Operated
- Provides optimal fluorescent dye response and contrast
- Features an anti-roll cuff
- Durable anodized body for years of heavy use





Specifications

Light Source:	LED
Lamp Style:	Cordless Flashlight
Lamp Head Diameter:	1.25 in (3.2 cm)
Length:	5.9 in (15 cm)
Weight:	4.8 oz (0.14 kg)
Power Source:	3 "AAA" batteries
Run Time:	5 hours (continuous)

NOTE: For most applications, our UV lamp does not require fluorescence-enhancing glasses.





2i

M I

Perfect size

for tight spaces

Full-color

clamshell

packaging

SPE-MVL-CS

- Battery operated
- Economical, compact light for finding leaks
- Perfect for tight spaces
- Durable anodized body with lanyard

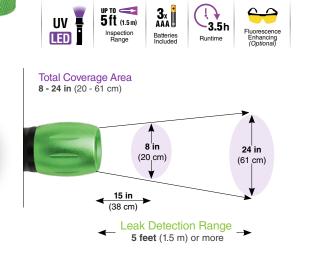


Specifications

Light Source:	LED
Lamp Style:	Cordless Flashlight
Lamp Head Diameter:	1.3 in (3.3 cm)
Length:	3.85 in (9.8 cm)
Weight:	3.52 oz (0.1 kg)
Power Source:	3 "AAA" batteries
Run Time:	3.5 hours (continuous)

NOTE: For most applications, our UV lamp does not require fluorescence-enhancing glasses.





FREQUENTLY ASKED QUESTIONS

UV MAN

Here to answer your questions!

Why is Spectroline trusted by more OEMs than any other brand?

Spectronics Corporation invented fluorescent leak detection in 1955. Today, we are the world's leading manufacturer of ultraviolet equipment and fluorescent leak detection dyes and system additives.

ECTROLIVE C

Spectroline products are **the first and only choice for AC&R professionals**. Our OEM-approved fluorescent dyes are co-solvent free, NSF certified, and can safely remain within AC&R systems.

Q: How do I use fluorescent leak detection dye?

Add our patented dye to the suspect system. Let the dye circulate. Once the dye has permeated the system, scan for leaks with one of our high-intensity leak detection flashlights. All leak sites will glow brightly with escaping fluorescent dye.

Q: A:

Α:

Which injection method should I use?

For small-to-medium sized AC&R systems: use our EZ-Ject[™] or GLO-STICK[®] injection methods for applications such as residential units, ice machines, window units, and refrigerators.

For medium-to-large sized AC&R systems: use our BigEZ[™] injection method for applications such as commercial units, supermarket units, refrigerated warehouses, food and dairy plants, and industrial facilities.

Review our product dosage information for the correct application.

What are co-solvents and how do they alter system performance?

Co-solvents are chemical substances added to increase the solubility of specific compounds. This means **co-solvents harmfully change the original lubricant properties of refrigerant oil.**

Co-solvents can lead to premature wear and outright damage. Poorly manufactured fluorescent dyes typically contain high levels of co-solvents. In addition to changing system properties, co-solvents have the potential to deteriorate system metals.

Why is dye concentrationimportant?

A:

Dye fluorescence is dependent on the **ratio of fluorescent material to carrier oil**. Poor performing dyes typically have low levels of fluorescent material. Simply put, poor dyes lack the concentration necessary to provide an effective fluorescent response.

Spectroline dyes are **concentrated** and able to fluoresce all leak areas brightly. This means Spectroline dyes are **more economical** because less dye is used per application.

How long does it take to find a leak?

A:

In small-to-medium sized systems, you can find leaks within minutes. In commercial systems, it may take a few hours for the dye to circulate completely.

For preventative maintenance, add Spectroline dye long before you have a problem. A technician can perform an inspection within a matter of seconds if the dye has already had time to fully circulate.

System Type: $^{\odot}$	Small Systems: Ice Machines, Window A/C Units & Refrigerators	Residential Systems	Light Commercial & Large Residential Systems	Commercial & Light Industrial Systems
EZ-Ject [™] Multi-Dose (Cartridge for Small to Me	dium Sized Systems		
Lubricant	Up to 15 oz (445 ml)	15.1 oz to 1.6 qt (445 ml to 1.5 L)	1.7 to 3.2 qt (1.6 to 3 L)	3.3 qt to 2 gal (3.1 to 7.6 L)
Refrigerant Charge	Up to 2.9 lb (1.3 kg)	3 to 4.9 lb (1.4 to 2.2 kg)	5 to 9.9 lb (2.3 to 4.5 kg)	10 to 25 lb (4.6 to 11.3 kg)
Tons of Cooling	Up to 1 ton (3.5 kW)	1.1 to 2 tons (3.9 to 7 kW)	2.1 to 6 tons (7.4 to 21.1 kW)	6.1 to 12 tons (21.5 to 42.2 kW)
Horsepower	Up to 1 Hp	1.1 to 4 Hp	4.1 to 10 Hp	10.1 to 25 Hp
Lines on Cartridge	1 line	2 lines	6 lines	8 - 14 lines

GLO-Stick® Single-Dose Capsules for Small to Medium Sized Systems

Lubricant	n/a	Up to 1.6 qt (1.5 L)	1.7 to 3.2 qt (1.6 to 3 L)	3.3 qt to 2 gal (3.1 to 7.6 L)
Refrigerant Charge	n/a	Up to 4.9 lb (2.2 kg)	5 to 9.9 lb (2.3 to 4.5 kg)	10 to 25 lb (4.6 to 11.3 kg)
Tons of Cooling	n/a	Up to 2 tons (7 kW)	2.1 to 6 tons (7.4 to 21.1 kW)	6.1 to 12 tons (21.5 to 42.2 kW)
Horsepower	n/a	Up to 4 Hp	4.1 to 10 Hp	10.1 to 25 Hp

Lubricant Type:

Universal/POE	n/a	SPE-GS1E	SPE-GS2E	SPE-GS3E
PVE	n/a	SPE-GS1PVE	SPE-GS2PVE	SPE-GS3PVE

① Always use the lubricant volume when it is known. Refrigerant charge, tonnage and horsepower are approximations.

GLO-STICK® dye capsules require the use of two RP-BV-50 bleed valves (for use on 1/4 inch flare hose fittings).

BigEZ [™] Multi-Dose Cartridge for Medium to Large Sized Systems		
SPE-BEZ5E	BigEZ [™] Method	1 line, 1/8 oz (3.7 ml) per 1/2 gal (1.9 L) of lubricant, 12.5 lb (5.7 kg) of refrigerant or 5 tons (17.6 kW) of cooling

SYSTEM ADDITIVES:

GLO Seal™ Fluorescent Dye + Sealant for Small to Medium Sized Systems		
SPE-EZDS-CS	EZ-Ject [™] Method	Treats up to 3.5 tons (12.3 kW) of cooling
SPE-GSDS-CS	Stick Capsule Method	Treats up to 3.5 tons (12.3 kW) of cooling
Cool Seal [™] A/C Leak Sealer for Small to Medium Sized Systems		
CE 1CE	E7 loot™ Mothod	Tracto un to 4 tono (14 1 kM) of cooling

CS_3CS Stick Cansula Mathed Treats up to 4 tons (14.1 kW) of cooling	EZ-Ject [™] Method Treats up to 4 tons (14.1 kW) of cooling	EZ-Ject [™] Method	CS-1CS
Stick capsule method inclusion of the total of t	ick Capsule Method Treats up to 4 tons (14.1 kW) of cooling	Stick Capsule Method	CS-3CS

AB-5CS	EZ-Ject [™] Method	Treats up to 2 tons (7 kW) of cooling
SPE-ABS-CS	Stick Capsule Method	Treats up to 2 tons (7 kW) of cooling

 $\ensuremath{\textcircled{O}}$ On severely acidic systems, double the dosage shown

Bottled Dyes for Medium to Large Sized Systems		
SPE-AG5E-16	AR-GLO [®] 5E	0.25 oz (7.4 ml) per gallon (3.8 L) of lubricant
SPE-WGG-8CS	WATER-GLO® ULTRA	8 oz (237 ml) per 500 gallons (1,900 L) of water





Trusted by more HVAC/R OEMs than any other brand...

EMERSON

OUPINT



Carrier

Copeland°

BRISTOL

RESIDENTIAL

FUITSU Honeywell

Mini-Splits Window Units Packaged Units



Whirlpool

SANYO

COMMERCIAL



Office Building Retail Shops Conference Halls Industrial Facilities





Supermarkets Ice machines Refrigerated Warehouses Food & Dairy Plants





(516) 333.4840 | Orders@Spectroline.com